

## Statistics Unit 3 Univariate Data Graphs & Measures of Quantitative Data

## Unit Test REVIEW

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Ms. Raskin looked at the number of tardy attendances to school for seniors in the class of 2018 based on method of transportation to school. The data are below.

## Walk/Bike/Metro

## Parent drop-off

- 1) Find the **five number summary** for each group. (5pts. each)
- 2) Create **parallel boxplots** to show the distribution of data for each group. (5pts.)
- 3) Compare the two groups using SOCS and comparison words between the two distributions of data. (6pts.)

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- 4) Find the **mean** and **standard deviation** of each data set. (2pts. each)
- 5) Make two **histograms**, one to show the distribution of data for each group. (5pts.)

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- 6) The two data sets have different **means** and **standard deviations**. How is that shown in your histograms? (5pts.)
- 7) Which combination of center and spread, **mean** and **standard deviation** or **median** and **IQR** best describes the data? Justify your answer using information from your statistics or your graphs. (4pts.)
- 8) Why do we have to use **standard deviation** as a measure of spread if we are using the **mean** as the center? (2pts.)

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- 9) Create a **back-to-back stemplot** to compare the two distributions of data. (4pts.)
- 10) Does the stemplot give any additional information that is not shown in the boxplots or histograms? If so, tell what information is given by the stemplot. (3pts.)
- 11) What is one advantage of using a **stemplot** over a **boxplot** or **histogram**? (2pts.)